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(71) Applicant: UNITED PARCEL SERVICE OF AMERICA, INC. [US/US]: 55 Glenlake Parkway, N.E., Atlanta, GA 30328 (US).

Drive, Southbury, CT 06488 (US). WANG, Chai-Seng (Jason); 4 Doolin Road, New City, NY 10956 (US). RECKTENWALT, James; 340 MacArthur Boulevard, Mahwah, NJ 07430-2388 (US).

(74) Agents: YOUNG, Jeffrey, E. et al.; Alston & Bird LLP, Bank of America Plaza, Suite 4000., 101 South Tryon Street, Charlotte, NC 28280-4000 (US).

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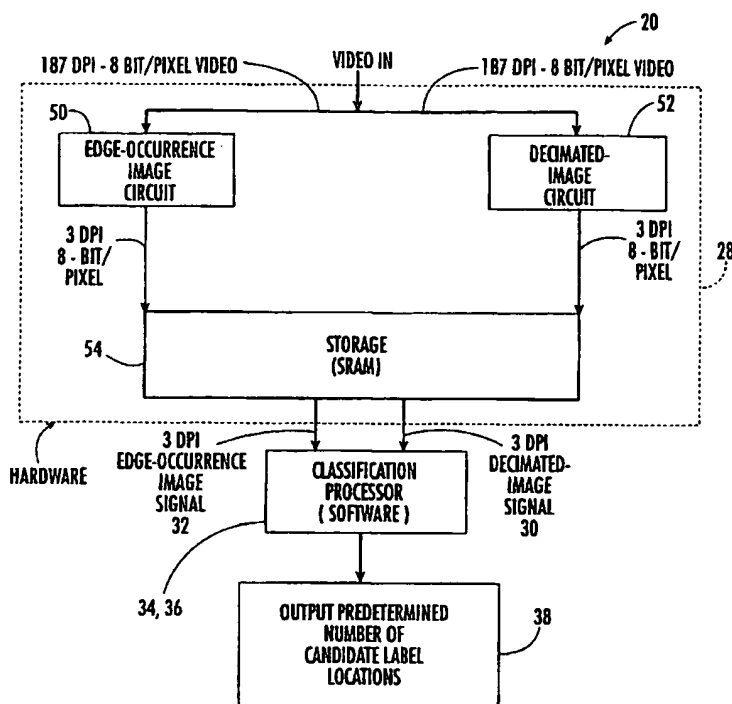
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(72) Inventors: WU, Jianxin; 391 Poets Way, Mahwah, NJ 07430 (US). SKINGER, Gregory, P.; 45 Winterwood

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(54) Title: MULTI-RESOLUTION LABEL LOCATOR



(57) Abstract: A multi-resolution label locator system divides an input image into a plurality of multi-pixel cells. The multi-resolution label locator system then creates a decimated image or low resolution image corresponding to the input image. The decimated image includes a common-characteristic value that corresponds to a multi-pixel cell of the input image. The multi-resolution label locator system identifies one or more areas within the decimated image that have characteristics corresponding to the characteristics of interest. While generating the decimated image, the multi-resolution label locator system simultaneously creates an edge-occurrence image that corresponds to the input image. The edge-occurrence image includes an edge value that corresponds to each cell of the input image. Each edge value represents the number of occurrences of an edge within the pixels of a corresponding cell of the input image. The multi-resolution label locator system identifies one or more candidate areas within the input image that have decimated-image characteristics and

edge-occurrence image characteristics corresponding to the characteristics of interest. The multi-resolution label locator system then classifies the candidate areas according to the likelihood of the input image containing indicia having the characteristics of interest. Lastly, the multi-resolution label locator system compiles a list of one or more candidate areas that most likely contain indicia having the characteristics of interest.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06K9/32 G06K9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, INSPEC, COMPENDEX, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 195 32 842 C (IBM) 19 December 1996 (1996-12-19) column 6, line 21 -column 7, line 21; claims 11-13	1-27
A	SEONG-WHAN LEE ET AL: "ADDRESS BLOCK LOCATION ON HANDWRITTEN KOREAN ENVELOPES BY THE MERGING AND SPLITTING METHOD" PATTERN RECOGNITION, PERGAMON PRESS INC. ELMSFORD, N.Y, US, vol. 27, no. 12, 1 December 1994 (1994-12-01), pages 1641-1651, XP000480990 ISSN: 0031-3203 abstract	1-27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Granger, B

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WHICHELO A P ET AL: "FAST LOCATION OF ADDRESS BLOCKS AND POSTCODES IN MAIL-PIECE IMAGES" PATTERN RECOGNITION LETTERS, NORTH-HOLLAND PUBL. AMSTERDAM, NL, vol. 17, no. 11, 16 September 1996 (1996-09-16), pages 1199-1214, XP000639568 ISSN: 0167-8655 abstract page 1199, right-hand column, line 1, paragraph 1; figure 10 Section "2.3 Candidate address block selection"	1-27
A	EP 0 661 889 A (TEXAS INSTRUMENTS INC) 5 July 1995 (1995-07-05) abstract	19-25

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Appl. No.

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